

Claim Amendments

Claims 1-5 (Cancelled)

6. (Currently Amended) A germicidal lamp for use in a purification system comprising:

a cylindrical ultraviolet lamp; and

~~an~~ a transparent envelope having an exterior non-uniform surface contour enclosing said cylindrical ultraviolet lamp, whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

7. (Original) A germicidal lamp as in claim 6 wherein: the exterior non-uniform surface comprises grooves.

8. (Original) A germicidal lamp as in claim 6 wherein: the exterior non-uniform surface comprises a helix.

9. (Original) A germicidal lamp as in claim 6 wherein: the exterior non-uniform surface comprises a double helix.

10. (Original) A germicidal lamp as in claim 6 wherein: said ultraviolet lamp comprises a fluorescent lamp.

11. (Currently Amended) A water purification system comprising:

a chamber for containing a fluid to be purified; and

an ultraviolet lamp comprising an exterior non-uniform surface contour placed within said chamber so that the fluid to be purified flows over the exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

12. (Currently Amended) A water purification system comprising:

a chamber for containing a fluid to be purified;

an ultraviolet lamp comprising an exterior non-uniform surface contour placed within said chamber, wherein said ultraviolet lamp comprises,

a cylindrical lamp; and

~~an~~ a transparent envelope placed over said cylindrical lamp, said transparent envelope having the exterior non-uniform surface contour, said transparent envelope placed within said chamber so that the fluid to be purified flows over the exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

13. (Original) A water purification system as in claim 11
wherein:

the non-uniform surface contour comprises grooves.

14. (Original) A water purification system as in claim 11
wherein:

the non-uniform surface contour comprises a helix.

15. (Original) A water purification system as in claim 11
wherein:

said ultraviolet lamp comprises a fluorescent lamp.

16. (Previously amended) An air purification system
comprising:

a room having air therein; and

an ultraviolet lamp having an exterior non-uniform surface
contour placed within said room,

whereby the exterior non-uniform surface contour is capable
of creating turbulent flow in the air.

17. (Currently Amended) An air purification system
comprising:

a room having air therein;

an ultraviolet lamp having an exterior non-uniform surface contour placed within said room, wherein said ultraviolet lamp comprises,

a cylindrical lamp; and

~~an~~ a transparent envelope placed over said cylindrical lamp, said transparent envelope having the exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow in the air.

18. (Original) An air purification system as in claim 16 wherein:

the non-uniform surface contour comprises grooves.

19. (Original) An air purification system as in claim 16 wherein:

the non-uniform surface contour comprises a helix.

20. (Original) An air purification system as in claim 16 wherein:

said ultraviolet lamp comprises a fluorescent lamp.

21. (Original) An air purification system as in claim 16 further comprising:

blower, said blower moving air over said ultraviolet lamp.

22. (Currently Amended) A method of purifying a fluid comprising the steps of:

providing fluid having a flow; and

placing within the fluid flow an ultraviolet lamp comprising an exterior non-uniform surface contour, so that the fluid flows over the exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

23. (Currently Amended) A fluid purification system comprising:

a chamber for containing a fluid to be purified;

a cylindrical ultraviolet lamp,

a tubular transparent envelope having an exterior non-uniform surface contour placed over said cylindrical ultraviolet lamp, said cylindrical ultraviolet lamp and said tubular transparent envelope placed within said chamber;

at least one end cap placed on said tubular envelope sealing said cylindrical ultraviolet lamp within said tubular transparent envelope wherein the fluid to be purified can not enter between said cylindrical ultraviolet lamp and said tubular transparent envelope so that the fluid to be purified flows over the exterior

non-uniform surface contour of said tubular transparent envelope;
and

electrical connectors extending through said at least one
end cap,

whereby the exterior non-uniform surface contour is capable
of creating turbulent flow by contact with the fluid in said
chamber.

24. (New) A fluid purification system as in claim 23
wherein:

the longitudinal axis of said tubular transparent envelope
is placed transverse to the flow direction of the fluid.